

# Identifying Factors to Reduce Readmission of Surgical Patients at LVHN, With a Focus on Cardiothoracic Patients

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# Identifying Factors to Reduce Readmission of Surgical Patients at LVHN, With a Focus on Cardiothoracic Patients

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## Intro/Background

It has been well documented that the shift from fee-for-service to bundled payments will dictate how hospital systems operate and are funded. A recent meta-analysis reported that 1 out of 5 Medicare beneficiaries are readmitted within 30 days at a cost of more than \$26 billion dollars per year.<sup>1</sup> A publication examining 30-day readmission after cardiac surgery stated that two-thirds of United States (US) hospitals have reimbursement penalties for higher than expected 30-day readmission rates.<sup>2</sup> Readmission reduction is a key concern for hospital executives since the Affordability Care Act created the Hospital Readmission Reduction Program (HRRP) in 2010. Centers for Medicare & Medicaid Services (CMS) is adding open heart surgery as a parameter, with payment penalties taking effect in October of 2016 making the readmission challenge even more difficult to manage.<sup>3</sup> Despite the financial implications of the HRRP, the most significant aspect of reducing unnecessary readmissions is that it is right for the patient, signaling higher-quality care delivery, and improving the patient and family care experience.<sup>3</sup> With the addition of a cardiac procedure to the HRRP, it imperative to understand factors that lead to cardiothoracic surgical readmissions. Although retrospective data has been collected here at Lehigh Valley Health Network (LVHN) identifying the diagnosis at readmission, feedback from the patient has never been examined. A JAMA publication states that an understanding of the patient's workload (plan for care, support of others, and access to health care services) and the patient's capacity (physical and mental health, social capital, financial resources, and environmental assets) is a crucial piece to understanding factors related to readmission.<sup>1</sup> This cumulative complexity model, the balance between workload and capacity, predicts that unless adequate support is given to patients, poor outcomes and hospital readmission will inevitably occur.<sup>1</sup> So moving forward, it is imperative that the patient's perspective be taken into account when examining ways to reduce surgical readmission.

## Problem Statement

Identifying factors to reduce 30 day readmission of surgical patients at LVHN, with a focus on cardiothoracic patients.

## Methods

A survey will be constructed utilizing questions combined from three sources: Cleveland Clinic readmission patient interview form, Carolinas Medical Center concurrent patient interview form, and the Kaiser South Bay Medical Center readmission diagnostic tool form. The project referenced above is designed to use existing tools to craft a survey to evaluate 30-day cardiothoracic surgical (CTS) readmissions is systematic, the expressed purpose of reducing local readmissions and improving LVHN CTS profitability. As such, submission to and oversight by the IRB is not required. Once created, the prospective survey will function as a readmission diagnostic tool (FIGURE 1). This tool will be used to gather information from the patient and/or family/caregiver regarding their thoughts and experiences related to the readmission. Additionally, we will gather input from the provider on their thoughts concerning the readmission. With the help of a cardiothoracic physician assistant, we interviewed and solicited information from patients readmitted to LVHN for a 1-2 month period.

Figure 1:

The screenshot shows a form titled 'LVHN READMISSION DIAGNOSTIC TOOL'. It includes sections for 'Patient Information', 'Readmission Information', 'Patient Perspective', 'Provider Perspective', and 'Readmission Information'. The form contains numerous checkboxes and text fields for gathering data on the reasons for readmission and patient/caregiver experiences.

## Results

To date we have gathered 8 patient's surveys, all of whom have met our 30 day readmission inclusion criteria. Patients included in the study had a number of different procedures done prior to discharge (FIGURE 2). In terms of psycho-social factors, 0% of our patients felt that their readmissions was related to funding/finance issues, lack of support, transportation, or being unable to reach a physician/home health profession. Additionally, all of our patients received discharge instructions and were confident in understanding them. From the provider perspective, we identified the diagnosis at readmission to see if our institution follows nation trends. (FIGURE 3). Only one system error was identified during data analysis, which was related to a medication left off of discharge summary, potential leading to an adverse outcome.

Figure 2:

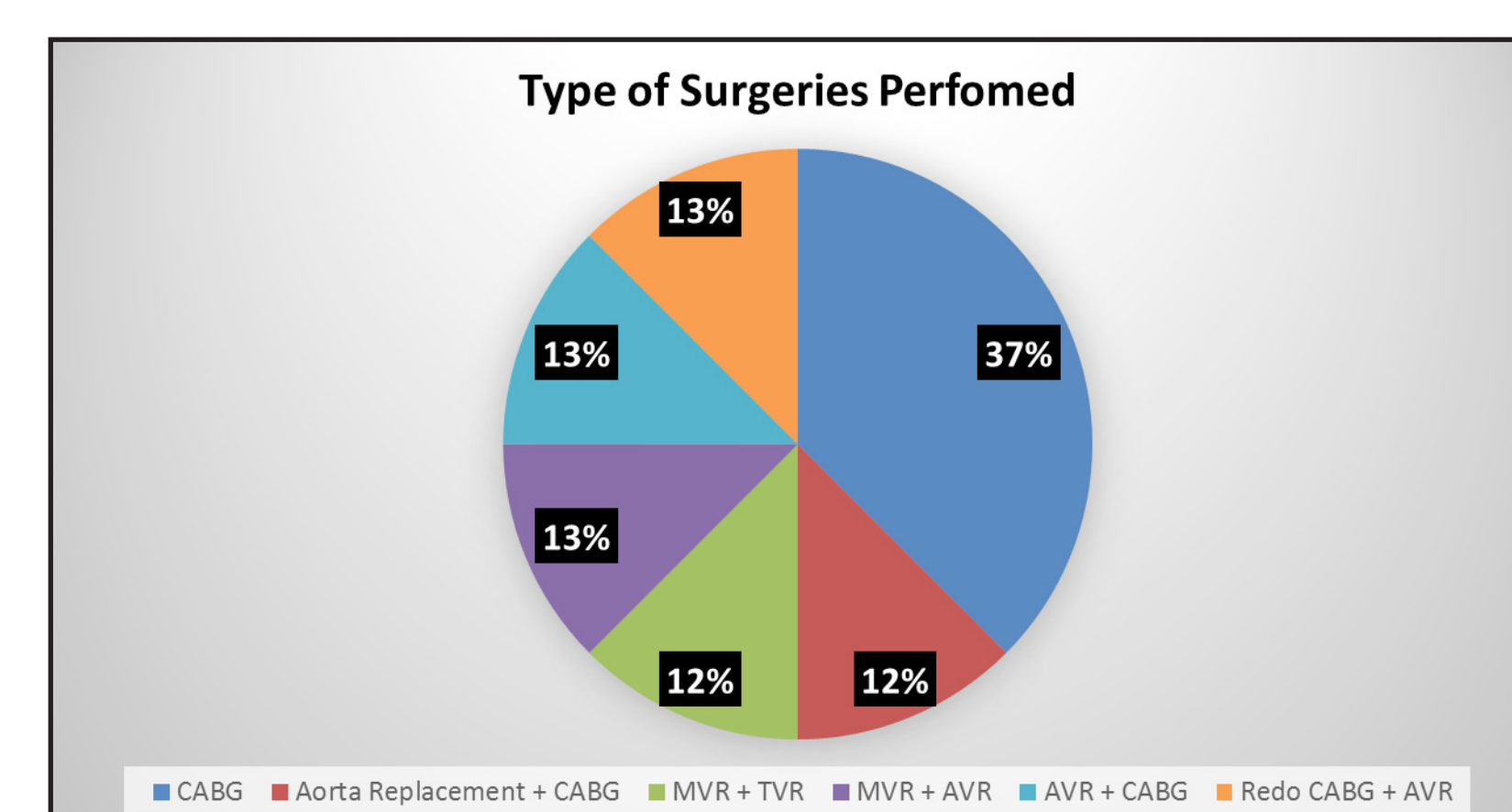
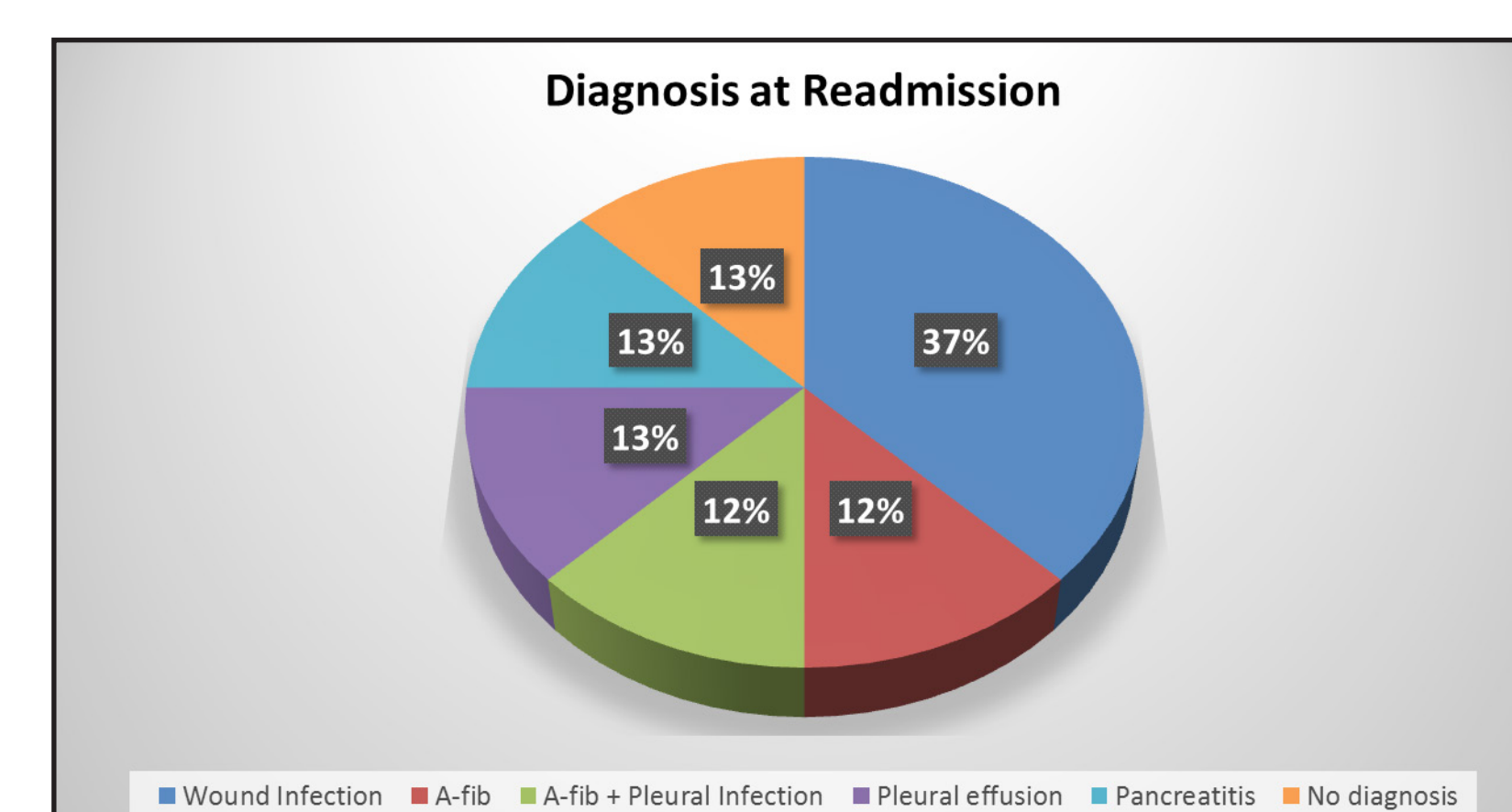


Figure 3:



## Conclusion & Future Implications

As it currently stands, 1-2 months of data collection did not yield the number of surveys necessary to draw inferences from. The study needs to continue for the next 10-11 months to accurately draw conclusions and make connections. We propose that once 100-150 surveys are collected, the data can be analyzed and recommendations be made to the cardiothoracic professional team.

### References:

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